Application No.: 10/510,654 3 Attorney Docket No.: 449122077800

In the Claims:

Please replace the claims, including all prior versions, with the listing of claims below.

Listing of Claims:

1. (currently amended) A method Method for obtaining a correctively adjusted output signal from thea measuring signal, having a periodic pressure dependence, of a lambda probe (4) located in thean exhaust of an internal combustion engine (1), whereby said measuring signal is sampled in a time-slot pattern and averaged through totaling over a specified summation period, said period corresponding to the period of oscillation (TP1, TP2), dependent on engine speed, of pressure pulsations of the exhaust, wherein,

characterized in that

- the continuously-sampled individual values of the measuring signal are buffered in a memory area of a memory (11) of a control device (8) for the internal combustion engine (1), and
- in that the averaging that includes a number N1, corresponding to the summation period, of individual values sampled in the time-slot pattern, and is initiated by the control device (8) at each instant (t_n) at which an updated probe output signal is required,
- wherein totaling is carried out across the N1 individual values block-by-block and already starts begins before the an update time (t_n), so that the block values already formed continuously block-by-block up to the update time (t_n) and buffered instead of the respective individual values are used for calculating an average.
- 2. (currently amended) The method Method according to claim 1, wherein characterized in that block-by-block totaling is carried out over in each case-M1 sequentially sampled and buffered individual values (M1-block) and is performed in a block time-slot pattern corresponding to M1 times the sampling time-slot pattern (sampling rate), and in that the update times (t_n) are synchronized with the M1 block time-slot pattern.
- 3. (currently amended) The method Method according to claim 2, wherein

characterized in that in cases where thea number N1 does not correspond to a multiple N of M1, thea first N1-N*M1 individual values in thea last sampled M1 block that extend beyond a maximum multiple N*M1 are included individually in a current averaging, while the remaining individual values in said M1 block are left out of consideration and are only included in thean averaging following thea current averaging in the form of a block value to be formed for this the entire M1 block and buffered.

- 4. (currently amended) The method Method according to claim 2 characterized in that wherein.
 - in cases where when the number N1 does not correspond to a multiple N of M1, each M1 block is split into two partial blocks B1 and B2, wherein the partial block B2 contains containing the last N1-N*M1 individual values in the a respective M1 block that extend beyond a maximum multiple N*M1 and wherein the partial block B1 contains containing the remaining first M1-(N1-N*iM1) individual values in the M1 block,

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- in that the two respective partial blocks B1 and B2 are totaled block-by-block in a block timeslot pattern into partial block values MW_B1 and MW_B2, which are buffered in place of the respective individual values,
- and in that the two partial block values in the N last processed M1 blocks and the partial block value MW_B2 of the M1 block processed immediately before the N last M1 blocks are used for current averaging.
- 5. (currently amended) The method Method according to claim 4 wherein, characterized in that in the case of at least one of the processed M1 blocks one of the two partial block lengths in a processed M1 block is also buffered until current averaging.
- 6. (currently amended) The method Method according to claim 1 characterized in that wherein the memory area is operated in thea ring memory mode.
- 7. (currently amended) The method Method according to claim 1 characterized in that wherein the measuring signal of a lambda probe (4) which has having a continuous characteristic curve of

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said measuring signal and-which is located upstream of a catalytic converter-(5) of the internal combustion engine (1) is evaluated.

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8. (New) The method of claim 1, wherein the measuring signal has a periodic pressure dependence.